
**Električne inštalacije zgradb - 7-710. del: Zahteve za posebne inštalacije ali
lokacije - Medicinski prostori**

Electrical installations of buildings - Part 7-710: Requirements for special
installations or locations - Medical locations

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Partie 7-710:

**Règles pour les installations ou emplacements
spéciaux – Locaux à usages médicaux**

Electrical installations of buildings –

Part 7-710:

**Requirements for special installations
or locations – Medical locations**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL INSTALLATIONS OF BUILDINGS –**Part 7-710: Requirements for special installations
or locations – Medical locations**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60364-7-710 has been prepared by IEC technical committee 64: Electrical installations and protection against electric shock.

The text of this standard is based on the following documents:

FDIS	Report on voting
64/1268/FDIS	64/1275/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

INTRODUCTION

The requirements of this part of IEC 60364 supplement, modify or replace certain of the general requirements as contained in parts 1 to 6 of IEC 60364.

The clause numbering following 710 are those of the corresponding parts or clauses from parts 1 to 6 of IEC 60364.

The absence of reference to a part or a clause means that parts 1 to 6 of IEC 60364 are applicable.

In medical locations it is necessary to ensure the safety of patients likely to be subjected to the application of medical electrical equipment. For every activity and function in a medical location, the particular requirements for safety have to be considered. Safety can be achieved by ensuring the safety of the installation and the safe operation and maintenance of medical electrical equipment connected to it. The use of medical electrical equipment on patients undergoing intensive care (of critical importance) has called for enhanced reliability and safety of electrical installations in hospitals so as to improve the safety and continuity of supplies which is met by application of this standard. Variations of the standard to further enhance safety and reliability are acceptable.

ELECTRICAL INSTALLATIONS OF BUILDINGS –

Part 7-710: Requirements for special installations or locations – Medical locations

710 Medical locations

710.1 Scope

The particular requirements of this part of IEC 60364 apply to electrical installations in medical locations so as to ensure safety of patients and medical staff. These requirements, in the main, refer to hospitals, private clinics, medical and dental practices, health care centres and dedicated medical rooms in the work place.

NOTE 1 It may be necessary to modify the existing electrical installation, in accordance with this standard, when a change of utilization of the location occurs. Special care should be taken where intracardiac procedures are performed in existing installations.

NOTE 2 Where applicable this standard can also be used in veterinary clinics. The requirements of this part do not apply to medical electrical equipment.

NOTE 3 For medical electrical equipment, refer to the IEC 60601 series.

710.2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60364-4-41:2001, *Electrical installations of buildings – Part 4-41: Protection for safety – Protection against electric shock*

IEC 60364-5-55:2001, *Electrical installations of buildings – Part 5-55: Selection and erection of electrical equipment – Other equipment*

IEC 60364-6-61:2001, *Electrical installations of buildings – Part 6-61: Verification – Initial verification*

IEC 60601-1:1988, *Medical electrical equipment – Part 1: General requirements for safety*
Amendment 2 (1995)

IEC 60601-1-1:2000, *Medical electrical equipment – Part 1: General requirements for safety – Collateral standard: Safety requirements for medical electrical systems*

IEC 60617-1:1985, *Graphical symbols for diagrams – Part 1: General information, general index – Cross-reference tables*

IEC 60617-11(DB)¹, *Graphical symbols for diagrams – Part 11: Architectural and topographical installation plans and diagrams*

IEC 61082-1:1991, *Preparation of documents used in electrotechnology – Part 1: General requirements*

¹ DB = Data Base.

IEC 61557-8:1997, *Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. – Equipment for testing, measuring or monitoring of protective measures – Part 8: Insulation monitoring devices for IT systems*

IEC 61558-2-15:1999, *Safety of power transformers, power supply units and similar – Part 2-15: Particular requirements for isolating transformers for the supply of medical locations*

710.3 Definitions

For the purposes of this part of IEC 60364, the following definitions apply.

710.3.1

medical location

location intended for purposes of diagnosis, treatment (including cosmetic treatment), monitoring and care of patients

NOTE To ensure protection of patients from possible electrical hazards, additional protective measures need to be applied in medical locations. The type and description of these hazards can vary according to the treatment being administered. The manner in which a room is to be used necessitates some division into different areas for differing medical procedures.

710.3.2

patient

living being (person or animal) undergoing medical or dental investigation or treatment

(adapted from 2.12.4 of IEC 60601-1)

NOTE The person under treatment for cosmetic purposes may be considered, as far as this standard is concerned, as a patient.

710.3.3

medical electrical equipment

electrical equipment, provided with not more than one connection to a particular supply mains and intended to diagnose, treat or monitor the patient under medical supervision and which

- makes physical or electrical contact with the patient, and/or
- transfers energy to or from the patient, and/or
- detects such energy transfer to or from the patient.

NOTE The equipment includes those accessories defined by the manufacturer as being necessary to enable normal use of the equipment.

710.3.4

applied part

part of the medical electrical equipment which in normal use

- necessarily comes into physical contact with the patient for the equipment to perform its function, or
- can be brought into contact with the patient, or
- needs to be touched by the patient

(adapted from 2.1.5 of amendment 2 to IEC 60601-1)

710.3.5

group 0

medical location where no applied parts are intended to be used

710.3.6

group 1

medical location where applied parts are intended to be used as follows:

- externally;
- invasively to any part of the body, except where 710.3.7 applies